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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,982	10/19/2001	Chad Nelson	12477-009001	8775

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EXAMINER

FONTAINE, MONICA A

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/039,982

Applicant(s)

NELSON ET AL.

Examiner

Monica A Fontaine

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 031202,082902
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-12, drawn to an apparatus for forming a panel structure, classified in class 425, subclass 348R.
- II. Claims 13-26, drawn to a method for forming panel structures, classified in class 264, subclass 310.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as one that does not require cooling.

This application contains claims directed to the following patentably distinct species of the claimed invention: Within Group II:

- a. Rotomolding method of forming a panel structure: Claims 20 (rotomolding), 21-26
- b. Vacuum Forming method of forming a panel structure: Claim 20 (vacuum forming)

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 13-19 are generic.

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During a telephone conversation with Greg Gardella on 25 February 2004 a provisional election was made without oral traverse to prosecute the invention of Group II, rotomolding species, claims 13-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-12 and 20(vacuum forming) are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

Claim 18 is objected to because of the following informalities: the phrase "is integrally into the panel" (line 3) appears to be missing a word such as --molded-- between "integrally" and "into". For purposes of examination, it will be interpreted that applicant does in fact claim that the trim member is integrally molded into the panel. Appropriate correction is required.

Claim 20 is objected to because of the following informalities: the word "is" in line 2 appears to be superfluous. Appropriate correction is required.

Claim 26 is objected to because of the following informalities: It is a duplicate of Claim 22. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 13-17 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wallin (U.S. Patent 6,494,705). Regarding Claim 13, Wallin shows that it is known to carry out a method for forming panel structures (Abstract) comprising providing a panel mold element

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including a generally planar molding surface and distal edges (Column 2, lines 20-34), at least one edge member disposed on said generally planar molding surface (Column 3, lines 6-43), at least one complimentary adjustable edge member disposed on said generally planar molding surface (Column 4, lines 40-58; Column 5, lines 10-43), and said generally planar molding surface and edge members cooperatively defining at least a portion of a panel mold cavity (Column 3, lines 10-15); introducing a resin into said mold cavity (Column 2, lines 3-8); heating the resin so that it conforms to the mold cavity (Column 2, lines 6-7); cooling the mold element (Column 2, lines 7-10); and removing the panel structure from the mold (Column 6, lines 1-2).

Regarding Claim 14, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method further comprising adjusting at least one adjustable member to alter the dimensions of the mold cavity (Column 2, lines 11-19).

Regarding Claim 15, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein said at least one adjustable member is frictionally engaged with said mold element (Column 4, lines 40-58; Column 5, lines 10-43).

Regarding Claim 16, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the resin is a thermoplastic (Column 2, line 5).

Regarding Claim 17, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the mold element includes two adjustable members and two fixed members and wherein the adjustable members and fixed members are rail members (Column 3, lines 7-24; Column 5, lines 14-47).

Regarding Claim 19, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the mold element is heated by an oven (Column 2, lines 6-7).

Regarding Claim 20, Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the mold element is installed in a rotomolding apparatus (Column 1, lines 49-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin, in view of Ockels (U.S. Patent 4,284,673). Wallin shows the process as claimed as discussed in the rejection of Claim 13 above, but he does not show including a trim member in his molding process. Ockels shows that it is known to carry out a method of molding a panel structure, comprising the step of inserting into the mold element a trim member that spans a gap between an adjustable member and a fixed member, such that the trim member helps define the mold cavity and is integrally into the panel structure (Column 3, lines 17-28). Ockels and Wallin are combinable because they are concerned with a similar technical field, namely, that of rotationally molding panel structures. It would have been prima facie obvious to one of ordinary skill in the

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art at the time the invention was made to include Ockels' trim element in Wallin's molding process in order to provide a decorative element on the molded panel structure.

Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallin, in view of Unkles (U.S. Patent 6,180,203). Regarding Claim 21, Wallin shows that it is known to carry out a method for rotationally molding a plastic part (Abstract) comprising adding a resinous material to a rotomold (Column 2, lines 4-5); heating the rotomold such that the resinous material form a molded part including at least one wall having an outer surface and an inner surface (Column 2, lines 6-7); cooling the rotomold (Column 2, lines 7-10); and removing the molded part from the rotomold (Column 6, lines 5-6). Wallin does not teach using reinforcing elements in his rotomolding process. Unkles shows that it is known to carry out a method of molding a panel structure, comprising adding reinforcing elements to resinous material in a rotomold (Column 6, lines 25-45); and heating the rotomold such that the resinous material and reinforcing elements form a molded part including at least one wall having an outer surface and an inner surface, wherein the reinforcing elements are disposed substantially throughout the wall of the molded part (Column 6, lines 48-67). Unkles and Wallin are combinable because they are concerned with a similar technical field, namely, that of rotomolding methods that form panel structures. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Unkles' reinforcing elements in Wallin's molding process in order to make his panel more stable and structurally fortified.

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Regarding Claims 22 and 26, Wallin shows the process as claimed as discussed in the rejection of Claim 21 above, including a method wherein the resin is a thermoplastic (Column 2, line 5), meeting applicant's claim.

Regarding Claim 23, Wallin shows the process as claimed as discussed in the rejection of Claim 21 above, but he does not show using specific reinforcing elements. Unkles shows that it is known to carry out a panel forming method, wherein the reinforcing elements are made from a material selected from the group consisting of carbon fibers and glass fibers (Column 6, lines 25-45). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Unkles' carbon or glass fiber reinforcing elements in Wallin's molding process in order to make his panel more stable and structurally fortified.

Regarding Claim 24, Wallin shows the process as claimed as discussed in the rejection of Claims 21 and 23, but he does not show using specific reinforcing elements in specific part areas. Unkles shows that that it is known to carry out a panel forming method, wherein the fibers protrude into an internal cavity of the molded part (Column 6, lines 48-67). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Unkles' reinforcing elements protruding into in the internal cavity of the panel formed by Wallin's molding process in order to make his panel more stable and structurally fortified.

Regarding Claim 25, Wallin shows the process as claimed as discussed in the rejection of Claim 21 above, including a method for forming panel structures (Abstract) comprising providing a panel mold element including a generally planar molding surface and distal edges (Column 2, lines 20-34), at least one edge member disposed on said generally planar molding surface (Column 3, lines 6-43), at least one complimentary adjustable edge member disposed on

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said generally planar molding surface (Column 4, lines 40-58; Column 5, lines 10-43), and said generally planar molding surface and edge members cooperatively defining at least a portion of a panel mold cavity (Column 3, lines 10-15), meeting applicant's claim.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with regard to forming panel structures with a rotomolding process:

U.S. Patent 5,693,271 to Johnson et al.

U.S. Patent 6,398,995 to Eisenlord et al.

U.S. Patent Application Publication 2002/0109251 to Sellepack


U.S. Patent 6,599,459 to Wallin

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaanni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Maf
February 6, 2004



MICHAEL COLAIANNI
PRIMARY EXAMINER